

Date: Wednesday, 1/11/2006 4:30:11 PM  
 User: Kim Johnston

## Process Sheet

|                       |                                       |  |                  |                               |  |
|-----------------------|---------------------------------------|--|------------------|-------------------------------|--|
| Customer              | : CU-DAR001 Dart Helicopters Services |  | Drawing Name     | : FITTING                     |  |
| Job Number            | : 25480                               |  | Part Number      | : D32161                      |  |
| Estimate Number       | : 10869                               |  | Drawing Number   | : D3216 REV A                 |  |
| P.O. Number           | : N/A                                 |  | Project Number   | : N/A                         |  |
| This Issue            | : 1/11/2006 S.O. No. : N/A            |  | Drawing Revision | : A                           |  |
| Prsht Rev.            | : NC                                  |  | Material         | : N/A                         |  |
| First Issue           | : N/A Type : PURCHASED PARTS          |  | Due Date         | : 1/31/2006 Qty: 151 Um: Each |  |
| Previous Run          | : N/A                                 |  |                  |                               |  |
| Written By            | : See COMMENT Below                   |  |                  |                               |  |
| Checked & Approved By | : " "                                 |  |                  |                               |  |
| Comment               | : Est: A 03.10.28 New Issue KJ/RF     |  |                  |                               |  |

## Additional Product

Job Number:



| Seq. #:   | Machine Or Operation: | Description : |
|---|-----------------------|---------------|
| 1.0   | PG                    | PURCHASING    |
|   |                       |               |
| <b>Comment:</b> PURCHASING<br>Issue P/O: <u>377</u> <u>h</u><br>Email or Ship DXF file to vendor<br>Laser Cut D3216-1 Fitting as per Dwg D3216<br>Material release note is required |                       |               |

|   |    |            |
|---|----|------------|
| 1.0   | PG | PURCHASING |
|   |    |            |
| <b>Comment:</b> PURCHASING<br>Issue P/O: <u>377</u> <u>h</u><br>Email or Ship DXF file to vendor<br>Laser Cut D3216-1 Fitting as per Dwg D3216<br>Material release note is required |    |            |

06-01-12 150

|   |         |         |
|---|---------|---------|
| 2.0   | D32161F | Fitting |
|   |         |         |
| <b>Comment:</b> Qty.: 1.0000 Each(s)/Unit Total : 150.0000 Each(s)<br>Fitting |         |         |

|   |         |         |
|---|---------|---------|
| 2.0   | D32161F | Fitting |
|   |         |         |
| <b>Comment:</b> Qty.: 1.0000 Each(s)/Unit Total : 150.0000 Each(s)<br>Fitting |         |         |

|   |             |                       |
|---|-------------|-----------------------|
| 3.0   | PACKAGING 1 | PACKAGING RESOURCE #1 |
|   |             |                       |
| <b>Comment:</b> PACKAGING RESOURCE #1<br>Recieve & Inspect for Transit Damage<br>Ensure Material Release Note is attached |             |                       |

|   |             |                       |
|---|-------------|-----------------------|
| 3.0   | PACKAGING 1 | PACKAGING RESOURCE #1 |
|   |             |                       |
| <b>Comment:</b> PACKAGING RESOURCE #1<br>Recieve & Inspect for Transit Damage<br>Ensure Material Release Note is attached |             |                       |

|                                   |     |                   |
|-----------------------------------|-----|-------------------|
| 4.0                               | QC6 | DIMENSIONAL CHECK |
|                                   |     |                   |
| <b>Comment:</b> DIMENSIONAL CHECK |     |                   |

|                                   |     |                   |
|-----------------------------------|-----|-------------------|
| 4.0                               | QC6 | DIMENSIONAL CHECK |
|                                   |     |                   |
| <b>Comment:</b> DIMENSIONAL CHECK |     |                   |

|   |             |                               |
|---|-------------|-------------------------------|
| 5.0   | SMALL FAB 1 | SMALL & MEDIUM FAB RESOURCE 1 |
|   |             |                               |
| <b>Comment:</b> SMALL & MEDIUM FAB RESOURCE 1<br>Deburr if necessary.<br>Tumble until parts have a polished finish. |             |                               |

|   |             |                               |
|---|-------------|-------------------------------|
| 5.0   | SMALL FAB 1 | SMALL & MEDIUM FAB RESOURCE 1 |
|   |             |                               |
| <b>Comment:</b> SMALL & MEDIUM FAB RESOURCE 1<br>Deburr if necessary.<br>Tumble until parts have a polished finish. |             |                               |

C:\06\02\08 152

152

06-02-09 153

DC 06/02/17 151

| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes  No  DQA:  Date: 06/02/21  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

NOTE: Date & initial all entries

Date: Wednesday, 1/11/2006 4:30:11 PM  
User: Kim Johnston

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: FITTING

Job Number: 25480

Part Number: D32161

Job Number:



Seq. #: Machine Or Operation:

Description :

6.0 QC5

INSPECT WORK TO CURRENT STEP



*Process 10*

Comment: INSPECT WORK TO CURRENT STEP

7.0 PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify and Stock

Location: */*

*1806102120 151*

8.0 DC

DOCUMENT CONTROL



*151*

Comment: DOCUMENT CONTROL

Inspection Level 21

*548 06/02/21*

*151*

*1806102121*

Job Completion



| W/O: |      | WORK ORDER CHANGES |    |      |     |                                     |                          |
|------|------|--------------------|----|------|-----|-------------------------------------|--------------------------|
| DATE | STEP | PROCEDURE CHANGE   | By | Date | Qty | Approval<br>Chief Eng /<br>Prod Mgr | Approval<br>QC Inspector |
|      |      |                    |    |      |     |                                     |                          |
|      |      |                    |    |      |     |                                     |                          |

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

| NCR: |      | WORK ORDER NON-CONFORMANCE (NCR) |                             |                                 |                |                           |                       |                          |
|------|------|----------------------------------|-----------------------------|---------------------------------|----------------|---------------------------|-----------------------|--------------------------|
| DATE | STEP | Description of NC<br>Section A   | Corrective Action Section B |                                 |                | Verification<br>Section C | Approval<br>Chief Eng | Approval<br>QC Inspector |
|      |      |                                  | Initial<br>Chief Eng        | Action Description<br>Chief Eng | Sign &<br>Date |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |
|      |      |                                  |                             |                                 |                |                           |                       |                          |

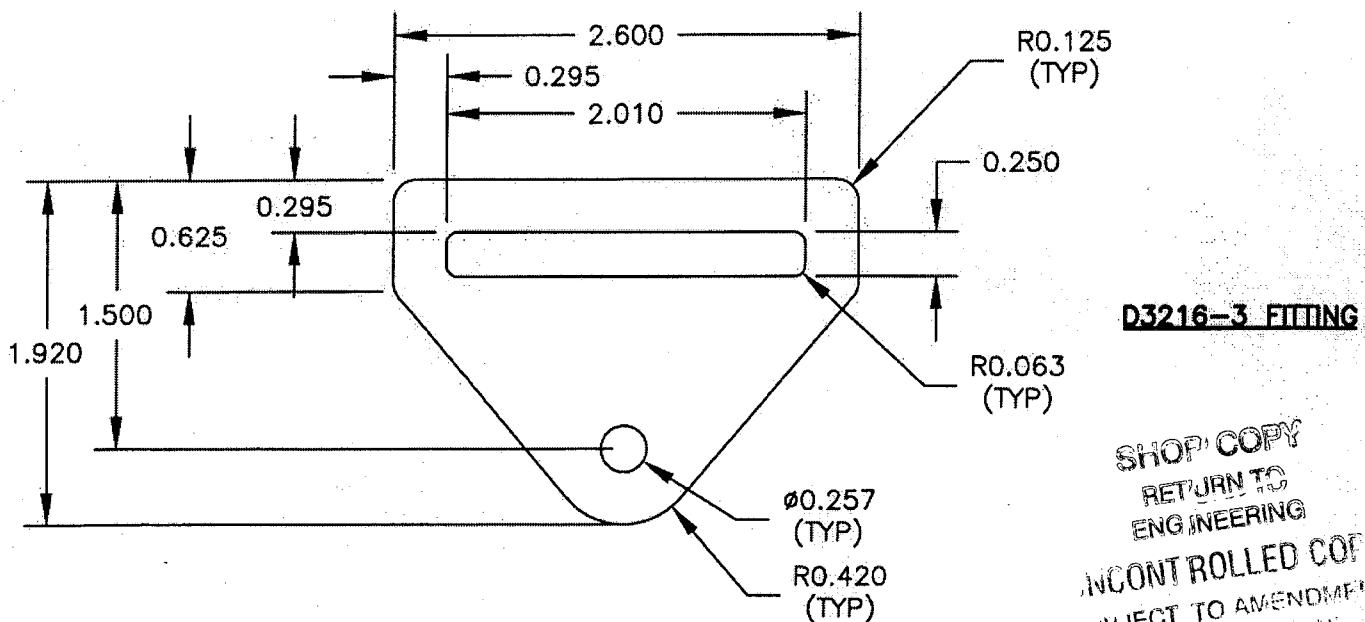
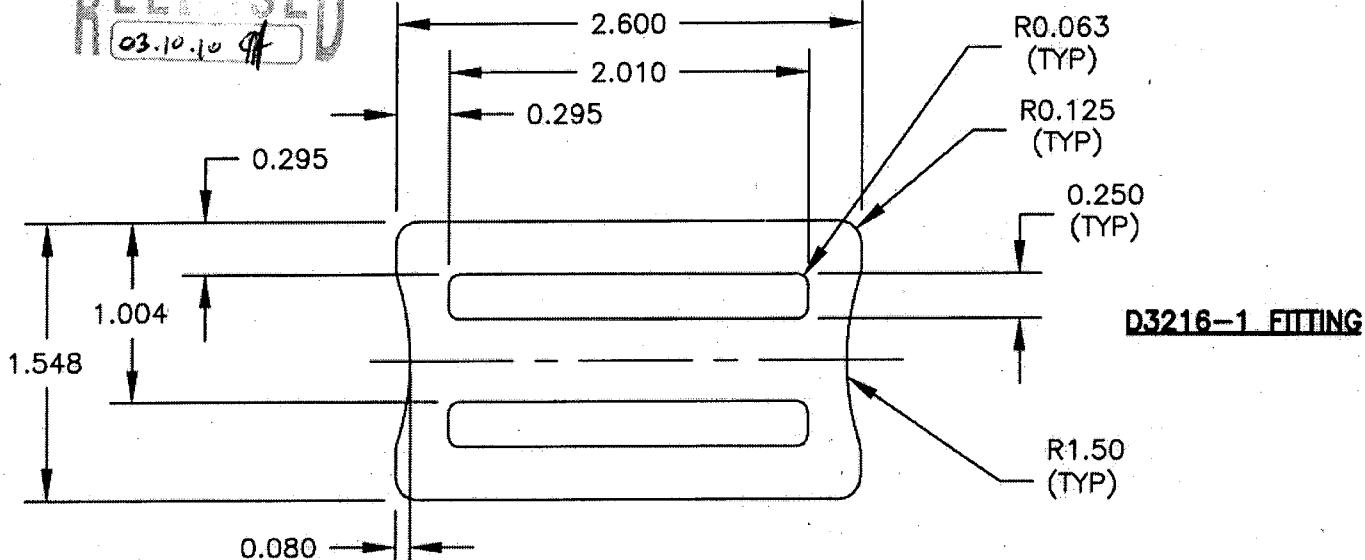
NOTE: Date & initial all entries

**DART**

|          |          |   |              |
|----------|----------|---|--------------|
| DESIGN   | DRAWN BY | DART AEROSPACE LTD<br>HAWKESBURY, ONTARIO, CANADA |              |
| CHECKED  | APPROVED | DRAWING NO.                                       | REV. A       |
|          |          | D3216   | SHEET 1 OF 1 |
| DATE     |          | TITLE   | SCALE        |
| 03.09.26 |          | FITTING   | 1:1          |
| A        | 03.09.26 | NEW ISSUE   |              |

**RELEASED**

03.10.10 0f

**D3216-1/-3 FITTING**

- 1) MATERIAL: AISI 304/316 PLATE, 0.125 THICK (REF DART SPEC. M304S11GA)
- 2) FINISH: MOLECRO POLISH
- 3) ALL DIMENSIONS ARE IN INCHES
- 4) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP EDGES 0.005 TO 0.015

SHOP COPY

RETURN TO  
ENGINEERINGUNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE

WORK CENTER

NO. 254.80



P41123PC002

Issued in accordance to Pressure Equipment Directive 97/23/EC Annex I,  
Paragraph 4.3 by TÜV Amtsgetestete GmbH (Notified Body Identification No. 0035)  
Inspection Certificate EN10204-3.1B.

Taiyuan Iron and Steel(Group)Co.,LTD  
NO.2 jiancaoping, Taiyuan, Shanxi, P.R.China  
TEL: (0351)3013328 FAX: (0351)3017816  
http://www.tisco.com.cn  
E-mail: tgbwg@tisco.com.cn

## INSPECTION CERTIFICATE

|                 |                      |                  |
|-----------------|----------------------|------------------|
| MATERIAL        | AISI304 No.2B Finish |                  |
| SPECIFICATION   | ASTM A240/A480       | ASME SA240/SA480 |
| L/C NO.         |                      |                  |
| CERTIFICATE NO. | 200412110            |                  |
| DATE OF ISSUE   | / /                  |                  |

CUSTOMER CONTRACT NO. DATA OF  
Marabeni-Itochu Steel Co. V-947 2004/12/20

Product Melting furnace Inspectors stamp Mark of the Manufacturer

COIL E+VOD Shanxi Taiyuan Stainless Steel Co.,ltd

| NO. | Heat No. | Coil No.     | Quantity | Dimensions    | Weight (kg) |
|-----|----------|--------------|----------|---------------|-------------|
| 1   | 4405025  | 4A11-303-1ZB | 1        | 11GA × 48 × C | 4358        |
| 2   | 4404509  | 4A10-356-1ZB | 1        | 14GA × 48 × C | 3920        |
| 3   | QHLL0164 | 4A12-141-3ZJ | 1        | 14GA × 48 × C | 4972        |
| 4   | Y408037  | 4A12-373-4ZD | 1        | 12GA × 48 × C | 4382        |
| 5   | Y408037  | 4A12-374-4ZD | 1        | 12GA × 48 × C | 4347        |
| 6   | Y408037  | 4A12-375-4ZD | 1        | 12GA × 48 × C | 4257        |
| 7   | 4405608  | 4A12-341-1ZJ | 1        | 12GA × 48 × C | 3793        |

Chemical Composition

| Heat No. | C     | Si    | Mn    | P     | S     | Cr     | Ni    | Cu | Al | Mo | N     |
|----------|-------|-------|-------|-------|-------|--------|-------|----|----|----|-------|
| 4405025  | 0.060 | 0.470 | 1.340 | 0.020 | 0.002 | 18.050 | 8.100 |    |    |    | 0.059 |
| 4404509  | 0.050 | 0.470 | 1.350 | 0.021 | 0.002 | 18.080 | 8.120 |    |    |    | 0.060 |
| QHLL0164 | 0.052 | 0.546 | 1.077 | 0.027 | 0.003 | 18.300 | 8.080 |    |    |    | 0.044 |
| Y408037  | 0.063 | 0.550 | 0.980 | 0.030 | 0.002 | 18.320 | 8.170 |    |    |    | 0.060 |
| Y408037  | 0.063 | 0.550 | 0.980 | 0.030 | 0.002 | 18.320 | 8.170 |    |    |    | 0.060 |
| Y408037  | 0.063 | 0.550 | 0.980 | 0.030 | 0.002 | 18.320 | 8.170 |    |    |    | 0.060 |
| 4405608  | 0.060 | 0.510 | 1.350 | 0.021 | 0.002 | 18.090 | 8.100 |    |    |    | 0.055 |

Mechanical Properties

| Test No.   | Tensile R m N/mm <sup>2</sup> | R <sub>P0.2</sub> Yield 0.2% N/mm <sup>2</sup> | R <sub>P1.0</sub> Yield <sub>0.5%</sub> N/mm <sup>2</sup> | Elongation A5% | Correlation Tests | Hardness |    |     |
|------------|-------------------------------|--|---|----------------|-------------------|----------|----|-----|
|            |                               |  |   |                |                   | HRB      | HV | HRC |
| 4405025-T  | 610                           | 255  |   | 65             |                   | 83       |    |     |
| 4404509-T  | 655                           | 265  |   | 61.5           |                   | 84       |    |     |
| QHLL0164-T | 660                           | 275  |   | 58.5           |                   | 83       |    |     |
| Y408037-T  | 660                           | 260  |   | 64             |                   | 85       |    |     |
| Y408037-T  | 660                           | 260  |   | 64             |                   | 85       |    |     |
| Y408037-T  | 660                           | 260  |   | 64             |                   | 85       |    |     |
| 4405608-T  | 655                           | 265  |   | 61.3           |                   | 84       |    |     |

Surface and dimensions controlled:

Work Inspector:

P/O 377